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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,910

02/20/2004

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L7307.04104

5420

24257 7590 08/20/2008
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EXAMINER

LEE, BENJAMIN P

ART UNIT

PAPER NUMBER

3641

MAIL DATE

DELIVERY MODE

08/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/781,910	Applicant(s) PEYRUCAIN ET AL.	
	Examiner BENJAMIN P. LEE	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above claim(s) 25-36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-24 is/are allowed.
- 6) ☒ Claim(s) 37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 5/29/2008, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Michael J. Carone/

Supervisory Patent Examiner, Art Unit 3641.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbs et al. (U.S. Patent 6,856,864) in view of Farineau et al. (U.S. Patent 4,964,599) and in further view of Bliss et al. (U.S. Patent 4,534,000).

3. In regards to claim 37, Gibbs et al (henceforth referred to as Gibbs) disclose a device to assist in the piloting of an aircraft in a non-precision approach during a landing phase (col. 7, lines 12-29 and col. 8, lines 8-31: Note that Gibbs teaches multiple approaches including non-precision and a computer that modifies, lists and prioritizes multiple approach strategies), the device comprising:

- a. a means for verifying, according to respective standards of operation, conditions relating to the correct functioning of a plurality of equipment of the aircraft and to the integrity and precision of measurements of parameters used for implementing the non-precision approach, based on information coming from the plurality of equipment. Note that although it appears that Applicant has

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properly invoked U.S.C. 112, sixth paragraph, the written description fails to define each of the corresponding "means" for performing the function. Note that Gibbs teaches a computer means that communicates or is integrated with the Flight Management System to determine a new intercept point along a new alternate approach and that this is based on aircraft position and distance to the runway (col. 8, lines 8-17). Further, note that the computer, as taught by Gibbs, is at least inherently capable of collecting, monitoring, categorizing and verifying conditions and parameters that are utilized in deriving and categorizing the approach strategies;

b. a means for selecting, on the basis of the verified conditions, one of a plurality of different non-precision approach categories. Note that the computer of Gibbs is taught to be capable of automatically producing and or modifying the alternate non-precision approaches and that these are "selected" via computer interface by a user;

c. a display means for presenting the selected approach category on a display screen (item 112);

d. a means for selecting a second approach category when the following conditions are verified simultaneously. Note that each of the "conditions" and corresponding equipment is well known in the art and since the Gibbs reference teaches a means for selecting any of multiple "approach categories", it is possible for this "selection" to be accomplished when each of the conditions are

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verified simultaneously, i.e. absent an alarm or indicator, each of the conditions could be assumed to be verified as functioning properly;

e. at least one flight management computer of the aircraft and is functioning correctly. Note that Gibbs disclose an FMS (col. 2, lines 56-67);

f. Gibbs fails to explicitly teach at least one inertial reference system of the aircraft, which integrates aerodynamic data and is functioning correctly.

However, Farineau et al (henceforth referred to as Farineau) teaches an aircraft with an Inertial Reference System (col. 8, lines 32-38). Further, it is common and well known in the art to incorporate an Inertial Reference System into the navigational system of an aircraft. It would have obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate an IRS into the aircraft of Gibbs as taught by Farineau to provide rate of change of position of the aircraft relative to a reference frame;

g. Gibbs fails to explicitly teach at least one assisted approach mode function of a multimode landing assistance receiver of the aircraft is functioning correctly.

However, it is common and well known in the art to utilize an assisted landing receiver on an aircraft. Further, Bliss et al (henceforth referred to as Bliss) teaches using a landing assist system with a receiver ("MLS" col. 3, lines 10-33).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to utilize any of various landing assist systems and receivers with the aircraft of Gibbs as taught by Bliss to assist in safely landing an aircraft;

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- h. a position value of the aircraft exhibits low uncertainty, wherein: each non-precision approach category defines the approach mode or modes that are possible from among a plurality of approach modes including a plurality of assisted approach modes and a selected approach mode. Note that the aircraft of Gibbs is inherently capable of providing at least a position value that exhibits “low” uncertainty. Further, note that Gibbs teaches that the on-board computer means lists the approach by category and/or type and that each of the approach “modes” are “defined” to the degree specified by Applicant. Applicant is reminded that all claim language must be given its broadest reasonable interpretation and Applicant’s use of “defines” fails to distinguish from the function of the Gibbs apparatus.
4. In regards to claim 38, Gibbs discloses the following:
- that the display screen is a primary screen for piloting the aircraft. Note that the monitor “screen” of Gibbs is inherently a device “for” piloting the aircraft, since data presented to the pilot via the screen is directly related to, in at least some instances, piloting the aircraft. Further, the term “primary” fails to distinguish the claimed “screen” from that of Gibbs, since the information displayed on the Gibbs screen is at least in some instances, an essential or primary component of piloting of the aircraft, i.e. approach data;
- the display means presents the selected approach category in a zone of the primary piloting screen that is used for the display of an approach category

during an instrument approach. Note that the monitor screen area in which the approach categories of Gibbs are presented, is inherently in a "zone of the primary piloting screen that is used for the display of an approach category".

Allowable Subject Matter

5. Claims 21-24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: With respect to each independent claim, the closest prior art fails to teach, in combination with all the limitations of the corresponding claim, selecting an approach category when the listed conditions are verified simultaneously.

Summary/Conclusion

6. Claims 37 and 38 are rejected, claims 21-24 are allowed and claims 25-36 are withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin P. Lee whose telephone number is 571-272-8968. The examiner can normally be reached between the hours of 8:30am and 5:00pm on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Benjamin P. Lee/

Examiner, Art Unit 3641

/Michael J. Carone/

Supervisory Patent Examiner, Art Unit 3641